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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,698	10/31/2001	Frank J. Kronzer	11301-0232 (44039-264310)	2529
22827	7590	07/28/2004	EXAMINER DICUS, TAMRA	
DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			ART UNIT 1774	PAPER NUMBER

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/003,698	Applicant(s) FRANK J. KRONZER	
	Examiner Tamra L. Dicus	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 11-15 is/are rejected.
- 7) ☐ Claim(s) 3-10,16-29,31 and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>06-01-04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The RCE and IDS is acknowledged.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-32 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 and 17-28 of copending Application No. 10/003,697 in view of USPN 6277229 to Popat et al.

The pending claims of '698 differ from the recitation of a discontinuous polymer layer. However, Patent '299 teaches it would have been obvious to include a discontinuous polymer layer because Patent '299 discloses printing polymeric adhesive coatings are conventional for application in transfers (col. 14, lines 15-20) for ink jet printers (col. 6, lines 30-33). Claims 1-32 are included in claims 1-8 and 17-28 of 10/003,697.

Claims 1-32 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 21-40 of copending Application No. 09/614,829 in view of USPN 6277229 to Popat et al.

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The pending claims of '698 differ from the recitation of a discontinuous polymer layer. However, Patent '299 teaches it would have been obvious to include a discontinuous polymer layer because Patent '299 discloses printing polymeric adhesive coatings are conventional for application in transfers (col. 14, lines 15-20) for ink jet printers (col. 6, lines 30-33). Claims 1-32 are included in claims 21-40 of 09/614,829.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 11-15, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,358,660 to Agler et al. in view of USPN 6551692 to Dalvey et al. and further in view of USPN 5,006,502 to Fujimura et al.

Agler teaches a transfer sheet in this order: antistatic (25)/substrate (21)/barrier (22)/release (23)/image receiving (24). The barrier 22 comprises aziridine (multifunctional aziridine crosslinking agent) (col. 8, line 48), crosslinkable polymers such as acrylic and other polymers (col. 10, line 60-col. 13), and whiteners (opacifying white pigment) (col. 10, line 53).

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The release is of polyurethane or acrylic resins (col. 14, line 30-35) as per instant claim 13.

Rheology modifiers (control agents) are in the release (col. 15, lines 34-35) (instant claim 14).

The substrate is a cellulosic nonwoven web or polyester film (col. 4, lines 42-45) per instant claim 15. Heat press or hand iron applies heat to the transfer and releases the image on receptors such as cotton fabrics such as T-shirts (col. 23, line 46-col. 24, line 12) (instant claim 30).

Agler does not teach a peelable film or the film over a release (instant claims 1 or 30) or the peelable film made of acrylic or polyolefin resins (instant claim 11). Dalvey teaches a image transfer sheet in this order: peel layer (16)/release (14)/substrate (12). Release (14) comprises silicon and acrylic polymers for release-enhancing properties (col. 5, line 60-col. 6, line 2). Peel layer (16) transfers the image to a second substrate such as flexible or inflexible material. See col. 3, lines 20-60. The release and peel layers function together to give a smooth transfer (col. 6, lines 13-20). The peel layer is a film of low density polyethylene (LDPE) or ethylene vinyl acetate (EVA) or ethylene acrylic acid (EAA) (instant claim 9). See also col. 2, lines 25-35. It would have been obvious to one of ordinary skill in the art to modify the sheet of Agler to include a peel over the release to assist in transferring to a secondary substrate as disclosed (col. 3, line 50-68 of Dalvey) and to further include a peel layer of acrylic or polyolefin resins because Dalvey teaches such resins are conventional to add as they exhibit a suitable melt index range for heat transfer (col. 3, lines 40-60 of Dalvey).

Agler does not teach a discontinuous opacifying polymer layer or the layer overlying a peelable film. Fujimura teaches a heat transfer sheet comprising in this order: a substrate with a releasing agent (1) (col. 6, lines 35-39)/ a writable layer (80) formed in a pattern through screen printing comprised of acrylic acid, ink, titanium oxide or calcium carbonate (white opacifying

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pigment) (discontinuous layer)/ peelable film (4). See col. 6, lines 55-62, col. 12, lines 23-45, and Figure 12. This structure is provided to peel the substrate for application of the writable layer. It would have been obvious to one of ordinary skill in the art to modify the sheet of Agler to include a discontinuous opacifying polymer layer overlying a peelable film because Fujimura teaches the construction allows effective heat transfer of an image having excellent image density, sharpness and resolution. See col. 1, lines 5-13, col. 12, lines 12-49.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,358,660 to Agler et al. in view of USPN 6551692 to Dalvey et al. and further in view of USPN 5,006,502 to Fujimura et al. and in further view of USPN 5053267 to Ide et al.

Agler is relied upon above. Agler does not teach a peelable film made with wax. Ide teaches a transfer comprising a peelable film of wax, ethylene-acrylic resin, polyvinyl alcohol, acrylic. See col. 3, lines 15-40. It would have been obvious to one of ordinary skill in the art to modify the sheet of Agler to include a peelable film made with wax as wax is a conventional ingredient to include in peelable films for heat transfers as taught by Ide col. 3, lines 15-40.

Allowable Subject Matter

Claims 3-10, 16-29 and 32-32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 6,531,216 to Williams et al. teaches a heat sealable coating multilayer film using Surlyn 1702 crosslinked EMAA copolymer. USPN 5,432,258 to Yoshimura teaches a transfer with crosslinking agents. USPN 6,020,397 to Matzinger teaches ink comprising aziridine, epoxy, white pigment forming images over substrates. USPN 6,277,229 to Popat et al. teaches multilayer adhesive inks in forms of patterns over transfers. USPN 5,366,251 to Brandt et al. teaches printed adhesives on transfers. USPN 6,139,672 to Sato et al. teaches image-transfers with printing. USPN 5,677,049 to Torii teaches heat transfer with ink images and releasing layers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is 571-272-1519. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

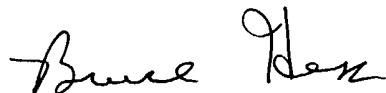
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tamra L. Dicus
Examiner
Art Unit 1774

July 19, 2004

A handwritten signature in cursive script, appearing to read "Bruce Hess".

**B. HAMILTON HESS
PRIMARY EXAMINER**